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				U.S.	PATENT DOCUMENTS	
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W	1.	2001/0009 031	A1	07-19-2001	Nitta et al.	
	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.	
	3.	2003/0025 205	A1	02-06-2003	Shively	
	4.	2003/0005 399	A1	01-02-2003	lgarashi et al.	
	5.	4,593,363		06-03-1986	Burstein et al.	
	6.	4,855,929		08-08-1989	Nakajima	
	7.	5,267,176		11-30-1993	Antreich et al.	
	8.	5,375,069		12-20-1994	Satoh et al.	
	9.	5,587,923		12-24-1996	Wang	
	10.	5,618,744		04-08-1997	Suzuki et al.	
	11.	5,633,479		05-27-1997	Hirano	
	12.	5,637,920		06-10-1997	Loo	
	13.	5,640,327		06-17-1997	Ting	
	14.	5,663,891		09-02-1997	Bamji et al.	
	15.	5,757,089		05-26-1998	Ishizuka	
	16.	5,784,289		07-21-1998	Wang	
	17.	5,798,936		08-25-1998	Cheng	
	18.	5,838,583		11-17-1998	Varadarajan et al.	
	19.	5,889,677		03-30-1999	Yasuda et al.	
	20.	5,980,093		11-09-1999	Jones et al.	

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				U.S.	PATENT DOCUMENTS
No	21.	6,070,108		05-30-2000	Andreev et al.
	22.	6,128,767		10-03-2000	Chapman
	23.	6,209,123	B1	03-27-2001	Maziasz et al.
	24.	6,253,363	B1	06-26-2001	Gasanov et al.
	25.	6,295,634	B1	09-25-2001	Matsumoto
	26.	6,324,674	B2	11-27-2001	Andreev et al.
	27.	6,324,675	B1	11-27-2001	Dutta et al.
	28.	6,327,693	B1	12-04-2001	Cheng et al.
	29.	6,327,694	B1	12-04-2001	Kanazawa
	30.	6,330,707	B1	12-11-2001	Shinomiya et al.
	31.	6,378,121	B1	04-23-2002	Hiraga
	32.	6,407,434	B1	06-18-2002	Rostoker et al.
	33.	6,412,102	B1	06-25-2002	Andreev et al.
	34.	6,415,422	B1	07-02-2002	Mehrotra et al.
	35.	6,442,743	B1	08-27-2002	Sarrafzadeh et al.
	36.	6,448,591	B1	09-10-2002	Juengling
	37.	6,473,891	B1	10-29-2002	Shively
	38.	6,480,991	B1	11-12-2002	Cho et al.
	39.	6,490,713	B2	12-03-2002	Matsumoto
	40.	6,519,751	B2	02-11-2003	Sriram et al.
	41.	6,543,043	B1	04-01-2003	Wang et al.
	42.	6,546,540	B1	04-08-2003	Igarashi et al.
	43.	6,557,145	B2	04-29-2003	Boyle et al.

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. K	) )	45.	JP	411296560	Α	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
		46.	JP	2000-82743	A	lgarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	7
		47.	JР	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	1
		48.	JР	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	<b>√</b>
		49.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	<b>√</b>

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M	50.	JP	H07-86407	A	Shinpel Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	V
	51.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	V

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		FOREIGN PATENT DOCUMENTS	
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Examiner*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
QU	52.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	53.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
	54.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	55.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.	
	56.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	
	57.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp 47-52, 2000.	
	58.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.	
	59.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.	
	60.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.	
	61.	Cong, J. et al., Performance-Driven Multi-Layer General Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.	
	62.	Enbody, R. et al., Near-Optimal <i>n</i> -Layer Channel Routing, 23 <sup>rd</sup> Design Automation Conference, 1986, pp. 708-714.	
	63.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 <sup>th</sup> ACM/IEEE Design Automation Conference, 1991, pp. 60-65.	
$\mathcal{T}$	64.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	

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		FOREIGN PATENT DOCUMENTS	
182	65.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	
	66.	Hu, J et al.: "A Timing-Constrained algorithm for Simultaneous Global Routing of Multiple Nets" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA USA, 5-9 Nov. 2000. Pages 99-103.	
,	67.	Kastner R et al.: "Predictable Routing" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. Pages 110-113.	
	68.	Khoo, K. et al., An Efficient Multilayer MCM Router Based on Four-Via Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 590-595.	
	69.	Lillis, J. et al., Table-Lookup Methods for Improved Performance-Driven Routing, 1998, pp. 368-373.	
	70.	Lipski, W. et al., A Unified Approach to Layout Wirability, Mathimatical Systems Theory, 1987, pp. 189-203.	
	71.	Lodi, E. et al., A Preliminary Study of a Diagonal Channel-Routing Model, Algorithmica, 1989, pp.585-597.	
	72.	Lodi, E. et al., Lecture Notes in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.	
	73.	Naclerio, N. et al., Via Minimization for Gridless Layouts, 24 <sup>th</sup> ACM/IEEE Design Automation Conference, 1987, pp. 159-165.	
	74.	Nam, G. et al, Satisfiability-Based Layout Revisited: Detailed Routing of Complex FPGAs Via Search-Based Boolean SAT, 1999, pp. 167-175	
	75.	Oh, J. et al., Constructing Lower and Upper Bounded Delay Routing Trees Using Linear Programming, 33rd Design Automation Conference, 1996.	
	76.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475.	
	77.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.	

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		FOREIGN PATENT DOCUMENTS	
W	Takashima, Y. et al, Routability of FPGAs with Extremal Switch-Block Structures, IEICE Trans. Fundamentals, vol. E81-A, No. 5, May 1998, pp. 850-856.		
	79.	Thakur, S. et al., Algorithms for a Switch Module Routing Problem, 1994, pp. 265-270.	
	80.	Theune, D., et al., HERO: Hierarchical EMC-constrained routing, 11/1992, IEEE pp 468-472	
	81.	Tseng, H., Timing and Crosstalk Driven Area Routing, pp. 378-381.	
	82.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 <sup>th</sup> ACM/IEEE Automation Conference, 1991, pp. 49-53.	
	83.	Wang, M. et al., Modeling and Minimization of Routing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Pacific, pp. 185-190.	
	84.	Wood, G. et al., FPGA Routing and Routability Estimation Via Boolean Satisfiability, Department of Electrical and Computer Engineering Camegie Mellon University, Pittsburgh, PA, pp. 119-125.	
	85.	Zhang, C.X. et al., Floorplan Design Using a Hierarchical Neutral Learning Algorithm, IEEE, 6/1991. pp. 2060-2063.	
	86.	Zhou, H. et al., An Optimal Algorithm for River Routing with Crosstalk Constraints, 1996.	
	87.	Zhou, H. et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.	
	88.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.	

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<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number(optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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INFO BADESTAT	RMATION			First Named Inventor	Steven Teig
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-	RELATED U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.1	U.S. Patent Document Number	Date of filing MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data	
W	1. 🗸	2002/0100007	12-06-2200	Steven Teig et al.	Parent application; present application is a continuation of 2002/0100007.	
	2. 🗸	2002/0133798	12-06-2000	Steven Teig et al.	Application regarding related placement technology.	
	3. ``	2002/0073390 S/N 09/737,210	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798.	
	ζ <sub>j</sub> 4.	Preliminary Amendment S/N 09/737,210	12-13-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0073390 does not accurately reflect the claims of S/N 09/737,210.	
	5. €	S/N 09/737,220	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798.	
	6. v	S/N 09/737,245	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798.	
	7. •	S/N 09/739,460	12-15-2000	Steven Teig et al.	Continuation of parent 2002/0100007	
	8. 🔪	S/N 09/739,589	12-15-2000	Steven Teig et al.	Continuation of parent 2002/0100007.	
	9. `	S/N 09/742,171	12-19-2000	Steven Teig et al.	Continuation of parent 2002/0100007.	
	10.3	2003/0121015 S/N 09/745,067	12-19-2000	Steven Teig et al.	Continuation of parent 2002/0100007.	
	11,	Preliminary Amendment S/N 09/745,067	12-19-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0121015 does not accurately reflect the claims of S/N 09/745,067.	
	12	2002/0069397	01-13-2002	Steven Teig et al.	CIP of parent 2002/0100007.	
	13.,	2002/0170027	02-20-2002	Steven Teig et al.	CIP of parent 2002/0100007.	
	14.3	2002/0157075	02-20-2002	Steven Teig et al.	CIP of parent 2002/0100007.	
	15.	2003/0088841 S/N 10/329,241	12-23-2002	Steven Teig et al.	CIP of 2002/0133798.	
	16.	Preliminary Amendment	12-23-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088841 does not	

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<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number(optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>8</sup> Applicant is to place a check mark here if English language Translation is attached.

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	RELATED U.S. PATENT DOCUMENTS								
69		S/N 10/329,241			accurately reflect the claims of S/N 10/329,241.				
	17.	2003/0079193	12-07-2001	Steven Teig et al.	Application regarding related routing technology.				
	18.	2003/0018947	12-07-2001	Steven Teig et al.	Application regarding related routing technology.				
	19.	2002/0147958	10-19-2001	Steven Teig et al.	Application regarding related routing technology.				
	20.	-2003/0063614	01-04-2002	Steven Teig et al.	Application regarding related routing technology.				
	21. ,	2003/0064559	01-04-2002	Steven Teig et al.	Application regarding related routing technology.				
	22.	2003/0063568	01-04-2002	Steven Teig et al.	Application regarding related routing technology.				
	23.	2003/0101428 S/N 10/040,915	01-05-2002	Steven Teig et al.	Application regarding related routing technology.				
	24.	Preliminary Amendment S/N 10/040,915	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the claims of S/N 10/040,915.				
	25.	, 2002/0166105 S/N 10/040,948	01-05-2002	Steven Teig et al.	Application regarding related routing technology.				
	26.	Preliminary Amendment S/N 10/040,948	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0166105 does not accurately reflect the claims of S/N 10/040,948.				
	27.	2003/0023943 S/N 10/040,954	01-05-2002	Steven Teig et al.	Application regarding related routing technology.				
	28.	Preliminary Amendment S/N 10/040,954	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0023943 does not accurately reflect the claims of S/N 10/040,954.				
	29.	2003/0043827 S/N 10/040,953	01-05-2002	Steven Teig et al.	Application regarding related routing technology.				

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Application Number 09/739,580

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Sheet 3 of 4				Attorney Docket Number	SPLX.P0015

			RELATED U	I.S. PATENT DOCU	MENTS
W.	30.	Preliminary Amendment S/N 10/040,953	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0043827 does not accurately reflect the claims of S/N 10/040,953.
	31.	2003/0066042 S/N 10/040,963	01-05-2002	Steven Teig et al.	Application regarding related routing technology.
	32.	Preliminary Amendment S/N 10/040,963	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0066042 does not accurately reflect the claims of S/N 10/040,963.
	33.	2002/0174412 S/N 10/041,942	01-07-2002	Steven Teig et al.	Application regarding related routing technology.
	34.	Preliminary Amendment S/N 10/041,942	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0174412 does not accurately reflect the claims of S/N 10/041,942.
	35.	2003/0088844 S/N 10/041,957	01-07-2002	Steven Teig et al.	Application regarding related routing technology.
	36.	Preliminary Amendment S/N 10/041,957	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088844 does not accurately reflect the claims of S/N 10/041,957.
	37.	2002/0199165 S/N 10/046,864	01-13-2002	Steven Teig et al.	Application regarding related routing technology. Also, CIP of parent application 2002/0100007.
	38.	Preliminary Amendment S/N 10/046,864	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0199165 does not accurately reflect the claims of S/N 10/046,864.
	39.7	2003/0066043	01-13-2002	Steven Teig et al.	Application regarding related routing technology.
	40.7	2003/0115566	01-13-2002	Steven Teig	Application regarding related routing technology.
-	413	2003/0056187	01-14-2002	Steven Teig et al.	Application regarding related routing ;

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NP	Ī.	S/N 10/047,982			technology. Also, CIP of parent application 2002/0100007.
W	42.	Preliminary Amendment S/N 10/047,982	01-14-002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0056187 does not accurately reflect the claims of S/N 10/047,982.
	43.	2003/0066044	01-13-2002	Steven Teig et al.	Application regarding related routing technology.
	44.	2003/0066045	01-13-2002	Steven Teig et al.	Application regarding related routing technology.
	45.	2003/0088845 S/N 10/047,978	01-13-2002	Steven Teig et al.	Application regarding related routing technology. Also, CIP of parent application 2002/0100007.
	46.	Preliminary Amendment for S/N 10/047,978	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088845 does not accurately reflect the claims of S/N 10/047,978.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of

Application Number	09/739,580
Filing Date	12/15/00
First Named Inventor	Steven Teig
Group Art Unit	2825
Examiner Name	
Attorney Docket Number	SPLX.P0015

	U.S. PATENTS RELATED TO THE PRESENT APPLICATIONS							
Examiner* Initials	Number Kind Code*			Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Relation to Present Application		
W	1.	6,516,455	B1	Teig, et al.	02-04-03			

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					U.S. PATENT DOCUMENTS	S	
Examiner* Initials		Cite No.1	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
V	E)	2.	2001/ 0003843	A1	Scepanovic et al.	06-14-01	
		3.	4,615,011		Linsker	09-30-86	
	$I^{-}$	4.	5,097,422		Corbin, II et al.	03-17-92	
		5.	5,532,934		Rostoker	07-12-96	
		6.	5,566,078		Ding et al.	10-15-96	
		7.	5,578,840		Scepanovic et al.	11-26-96	
		8.	5,634,093		Ashida et al.	05-27-97	
		9.	5,636,125		Rostoker et al.	06-03-97	
		10.	5,650,653		Rostoker et al.	07-22-97	
		11.	5,742,086		Rostoker et al.	04-21-98	
		12.	5,757,656		Hershberger et al.	05-26-98	
		13.	5,777,360		Rostoker et al.	07-07-98	
		14.	5,811,863		Rostoker et al.	09-22-98	
		15.	5,822,214		Rostoker et al.	10-13-98	
		16.	5,859,449		Kobayashi et al.	01-12-99	-
		17.	5,898,597		Scepanovic et al.	04-27-99	
		18.	5,914,887		Scepanovic et al.	06-22-99	
		19.	5973376		Rostoker et al.	10-26-99	
		20.	6,035,108		Kikuchi	03-07-00	
		21.	6,058,254		Scepanovic et al.	05-02-00	

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<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE 09/739,580 **Application Number** Substitute for form 1449A/PTO Filing Date 12/15/00 INFORMATION DISCLOSURE First Named Inventor Steven Teig STATEMENT BY APPLICANT Group Art Unit 2825 (use as many sheets as necessary) **Examiner Name** Sheet 2 3 **Attorney Docket Number** SPLX.P0015

				U.S. PATENT DO	CUMENTS	
8	22.	6,068,662		Scepanovic et al.	05-30-00	
	23.	6,123,736		Pavisic et al.	09-26-00	
	24.	6,134,702		Scepanovic et al.	10-17-00	
	25.	6,155,725		Scepanovic et al.	12-05-00	
$\top$	26.	6,175,950		Scepanovic et al.	01-16-01	
	27.	6,216,252	B1	Dangelo et al.	04-10-01	
	28.	6,230,306	B1	Raspopovic et al.	05-08-01	
	29.	6,247,167	B1	Raspopovic et al.	06-12-01	4
	30.	6,249,902	B1	Igusa et al.	06-19-01	RECEIV HAR 20 TECHNOLOGY
	31.	6,260,179	B1	Ohsawa et al.	07-10-01	RECEIVET HAR 20 20 HNOLOGY CEN
	32.	6,262,487	B1	Igarashi et al.	07-17-01	HAR'
	33.	6,289,495	B1	Raspopovic et al.	09-11-01	20 EV
	34.	6,301,686	B1	Kikuchi et al.	10-09-01	NED 0 2003 CENTER
	35.	6,385,758	B1	Kikuchi et al.	05-07-02	03 11.R
	36.	6,401,234	B1	Alpert et al.	06-04-02	,280Ó
	37.	6,405,358	B1	Nuber	06-11-02	ρά
	38.	6,412,097	B1	Kikuchi et al.	06-25-02	
	39.	6,436,804	B2	Igarashi et al.	08-20-02	
	40.	6,463,575	B1	Takahashi	10-08-02	

	FOREIGN PATENT DOCUMENTS								
Examiner* Initials	Cite No.1	For Office <sup>3</sup>	eign Patent Do Number	cument Kind Code (if known) <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>	
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## NON PATENT LITERATURE DOCUMENTS

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Examiner* Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	τ <sup>¢</sup>
12)	42.	A.H. Farrahi et al., Quality of EDA CAD Tools: Definitions, Metrics and Directions, Quality Electronic Design, 2000, Proceedings of the first International Symposium on March 2000, pp 395-405.	
	43.	C. Chiang, et al., Wirability of Knock-Knee Layouts with 45° Wires, IEEE Transactions on Circuits and Systems, Vol. 38, Issue 6, pp 613-624, June 1991.	
	44.	J. Su et al., Post-Route Optimization for Improved Yield Using Rubber-Band Wiring Model, 1997 International Conference on Computer-Aided Design, pp 700-706, November 1997.	
	45.	J. Vicente, RSR: A New Rectilinear Steiner Minimum Tree Approximation for FPGA Placement and Global Routing, Proceedings of the 24 <sup>th</sup> Euro Micro Conference, pp 192-195, August 1998.	
	46.	K. Powers et al., The 60° Grid: Routing Channels in Width d/square root 3, VLSI, 1991, Proceedings., First Great Lakes Symposium on Kalamazoo, MI, USA, pp 214-291, March 1991.	
	47.	M. Alexander et al., Performance-Oriented Placement and Routing for field-programmable gate arrays, Proceedings of the European Design Automation Conference, pages 80-85, 1995.	
	48.	M. Alexander et al., Placement and Routing for Performance-Oriented FPGA Layout, VLSI Design, Vol. 7, No. 1, 1998.	
	49.	M. Igarashi et al., A Diagonal-Interconnect Architecture and Its Application to RISC Core Design, 2002 IEEE Solid-State Circuits Conference, pp 210-460, February 2002.	
	50.	P. Dood, et al. A Two-Dimensional Topological Compactor with Octagonal Geometry, 28 <sup>th</sup> ACM/IEEE Design Automation Conference, pp 727-731, July 1991.	
	51.	P. Parikh, et al., Congestion Driven Quadratic Placement, Proceedings of Design Automation Conference, 1998, pp 275-278.	
	52.	R. Putatunda et al., VITAL: Fully Automatic Placement Strategies for Very Large Semicustom Designs, Proceedings of the International Conference on Computer Design: VLSI in Computers and Processors, pp 434-439 October 1988.	
	53.	S. Dutt, et al., Probability-Based Approaches to VLSI Circuit Partitioning, IEEE Trans. on Computer-Aided Design of IC's and Systems, Vol. 19, No. 5, May 2000, pp 534-549.	Γ
	54.	Y. Sekiyama et al., Timing-Oriented Routers for PCB Layout Design of High-Performance Computers, International Conference on Computer Aided Design, pp 332-335, November 1991.	
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